

## **REMARKS**

Applicant appreciates the Examiner's thorough consideration provided in the present application. Claims 1-20 are currently pending in the instant application. Claims 1, 6, 11 and 16 have been amended. Claims 1, 6, 11 and 16 are independent. Reconsideration of the present application is earnestly solicited.

### **Reasons for Entry of Amendments**

It is respectfully requested that the present amendments be entered into the official file in view of the fact that the amendments to the claims automatically place the present application into condition for allowance. In the alternative, if the Examiner does not believe that the application is in condition for allowance, it is respectfully requested that the amendments be entered for the purposes of appeal. The amendments to the claims simplify the issues on appeal by clarifying that the image-handling of the portion image data is performed by using incidental information so that the image-handling is performed while the portion image data remains encrypted.

Applicant submits that the amendments to the independent claims do not raise any new issues, since the claims as presented in the Amendment dated March 1, 2004 recited above aspect of the present invention. Specifically, the independent claims previously recited that the portion image data remains encrypted during the image-

handling. The above-amendments to the independent claims have been presented to clarify the present invention.

### **Claim Rejections Under 35 U.S.C. § 103**

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Iizuka, U.S. Patent No. 5,664,030 in view of Mast, U.S. Patent No. 5,881,287, and further in view of Wootton et al., U.S. Patent No. 5,870,471. This rejection is respectfully traversed.

The present invention is directed to an image encrypting method and device and a recording medium on which image encrypting procedures or an encrypted image file is recorded. Independent claim 1 of the present invention is directed to the image encrypting method and recites a combination of process steps including "a fourth process of encrypting every said portion image data to provide every said portion image data with security so that unauthorized access to the portion image data cannot be obtained without decrypting." In addition, independent claim 1 recites "wherein image-handling of said portion image data is performed by using said incidental information so that the image-handling is performed while said portion image data remains encrypted." Applicant submits that the combination of references relied on by the Examiner fail to teach or suggest the presently claimed invention as recited in independent claim 1.

The Examiner considers the “encoding” and “scrambling” of lizuka to read on the encrypting of the present invention (see paragraph 4 of the Examiner’s Office Action). This interpretation is respectfully traversed. Specifically, the alleged “encrypting” of lizuka is actually an encoding process that is not analogous to the encrypting of the portion image data “to provide every said portion image data with security so that unauthorized access to the portion image data cannot be obtained without decryption” as recited in independent claim 1 of the present invention. Since the lizuka reference is not directed to encryption, Applicant submits that this reference fails to disclose this aspect of the presently claimed invention.

In the prior art of record relied upon by the Examiner, encoding of image data is not for security purposes, but is a change in format that allows the image on a recording medium to be properly read by a particular device. In contrast, encryption prevents the image data from being recognized by a particular device unless access to the image data is authorized. Referring to page 1 of the present specification, a public key system or a common key system are examples of conventional encryption methods.

In summary, the lizuka reference is directed to a method and apparatus for recording/reproducing image data, which includes error checking codes that are added to a recording medium in order to cope with the partial destruction of a scanned image. However, the lizuka reference is silent with regard to encryption of image data as in the

present invention. In view of this, the lizuka reference fails to teach or suggest the present invention as recited in claim 1.

Referring to page 3, lines 7-9 of the Examiner's Office Action, it appears that the Examiner is in agreement with Applicant that the lizuka reference fails to disclose encryption; however, the Examiner relies on the Mast reference in order to modify the lizuka reference to arrive at the presently claimed invention. Applicant respectfully submits that the modification proposed by the Examiner would not have been obvious to one having ordinary skill in the art. In addition, Applicant submits that even if the modification were obvious, a fact that Applicant does not agree with, the modification would not arrive at the presently claimed invention.

Referring to the Mast reference, this reference is directed to a method and apparatus for copy protection of images in a computer system. Referring to page 3, fifth full paragraph of the Examiner's Office Action, the Examiner asserts that Mast discloses a "process of encrypting every portion image data to provide every portion image data with security so that unauthorized access to the portion image data cannot be executed without using the incidental information." The Examiner refers to column 3, lines 50-57 and column 5, lines 26-32 of Mast for this teaching. However, this portion of Mast is silent with regard to using incidental information to handle images as in the presently claimed invention. In view of this, it appears that the Examiner's rationale for modifying the lizuka reference is misplaced. Applicant therefore submits that it would not be

obvious to modify the lizuka reference as asserted by the Examiner. Reconsideration and withdrawal of the Examiner's rejection are therefore requested.

An advantageous feature of the presently claimed invention is that it enables a device to respond to a request for transmission for a portion of an image due to information incidental to the image, e.g., even if the device is not authorized to decrypt the encrypted image file. In view of this, it is possible to perform image-handling so that the image-handling is performed while the portion image data remains encrypted. Applicant submits that the devices of lizuka and Mast clearly do not teach or suggest this beneficial effect.

With regard to the lizuka reference, since this reference is not directed to encryption, this reference certainly does not teach or suggest handling images while images are encrypted.

With regard to the Mast reference, this reference only discloses encryption of an image. There is no disclosure in this reference of handling images while the images are encrypted as recited in the presently claimed invention. In view of this, the Mast reference fails to make up for the deficiencies of lizuka.

While not conceding to the appropriateness of the Examiner's rejection, but merely to expedite prosecution of the present application, independent claim 1 of the present invention has been amended to recite "wherein image-handling of said portion image data is performed by using said incidental information so that the image-handling

is performed while said portion image data remains encrypted." Applicants respectfully submit that the above amendment to independent claim 1 merely clarifies what was previously recited in claim 1. Specifically, in the presently claimed invention, the image-handling can be performed while the portion image data remains encrypted, since "image-handling of said portion image data is performed by using the incidental information."

Referring to page 4, line 5 of the Examiner's Office Action, the Examiner appears to recognize that the combination of Iizuka and Mast fail to disclose image-handling of the portion image data so that the image-handling is performed while the portion image data remains encrypted. However, the Examiner modifies the combination of Iizuka and Mast in view of Wootton et al. in order to handle the portion image data while the portion image data remains encrypted. Applicant respectfully submits that this modification by the Examiner is unreasonable. First, Applicant submits that the Wootton et al. reference does not disclose portion image data remaining encrypted during image handling as asserted by the Examiner. Second, Applicant submits that there is insufficient motivation in the references to modify the combination of Iizuka and Mast in the manner proposed by the Examiner.

With regard to the Wootton et al. reference, the Examiner refers to column 2, lines 12-31 and column 7, lines 3-10 for a teaching of handling encrypted portion image data. The Wootton et al. reference fails to disclose this aspect of the presently claimed

invention. Referring to column 2, lines 6-12 of Wootton et al., it is disclosed that Wootton et al. is directed to a method of authentication of visual images. Although it is also disclosed in Wootton et al. that the visual images may be encrypted, this reference appears to be silent about the encrypted visual images remaining encrypted during image handling as recited in the independent claims of the present invention.

With regard to column 2, lines 8-10 of Wootton et al., it is stated "if the image is transmitted from one location to another." In addition, it is stated at column 7, line 10 "regardless of its subsequent use." However, Wootton et al. does not specifically state that the image handling occurs while the visual images remain encrypted as in the presently claimed invention. It is entirely possible that the visual images are decrypted and encrypted prior to and after transmission from one location to another or any subsequent use.

With regard to column 2, lines 12-18 of Wootton et al., it is disclosed that a portion of the image is encrypted "at the time the image is produced" and the encrypted portion is maintained with the entire image. However, it is also disclosed at this portion of Wootton et al. that the portion image data is maintained "for subsequent authentication of the image." It is not disclosed that the subsequent authentication is after some image handling while the encrypted image remains encrypted. It is entirely possible that the "subsequent authentication" is an authentication of the original encrypted image data.

With regard to column 2, lines 19-31 of Wootton et al., it is disclosed that the image data is encrypted in a certain way; however, there is no indication that image handling occurs while the image data is encrypted.

To the extent the Examiner still believes that the Wootton et al. reference discloses the handling of image data while the image data remains encrypted, a fact that Applicant does not agree with for the above reasons, Applicant submits that the Examiner's modification of the combination of Iizuka and Mast is unreasonable. The Iizuka, Mast and Wootton et al. references are directed to entirely different fields of endeavor. Iizuka is directed to encoding, Mast is directed to encryption and Wootton et al. is directed to authentication. In view of this, Applicants submit that the Examiner is conducting prohibited hindsight.

In view of the above, Applicant submits that the Wootton et al. reference fails to make up for the deficiencies of Iizuka and Mast. Accordingly, independent claim 1 is non-obvious over the combination of references relied on by the Examiner.

With regard to independent claims 6, 11 and 16, these claims also recited that the image handling is performed by using the incidental information so that the image-handling is performed while the portion image data remains encrypted as recited in independent claim 1 of the present invention. Accordingly, these claims are allowable for the same reasons mentioned above with regard to independent claim 1.



With regard to dependent claims 2-5, 7-10, 12-15 and 17-20, Applicant respectfully submits that these claims are allowable due to their respective dependence on independent claims 1, 6, 11 and 16, as well as due to the additional recitations in these claims.

With specific regard to dependent claim 4, for example, this claim recites that the incidental information is also encrypted. The Examiner asserts that the lizuka and Mast references disclose encrypting portion image data and incidental information (see page 5, second full paragraph of the Examiner's Office Action); however, Applicant submits that the lizuka does not disclose encryption and column 7, lines 21-26 of Mast do not disclose encrypting incidental information. Accordingly, the Examiner's rejection of claim 4 is improper and should be withdrawn.

In view of the above amendments and remarks, Applicant respectfully submits that claims 1-20 clearly define the present invention over the references relied on by the Examiner. Accordingly, reconsideration and withdrawal of the Examiner's rejection under 35 U.S.C. § 103 are respectfully requested.

### **CONCLUSION**

Since the remaining references cited by the Examiner have not been utilized to reject the claims, but merely to show the state-of-the-art, no further comments are deemed necessary with respect thereto.

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.

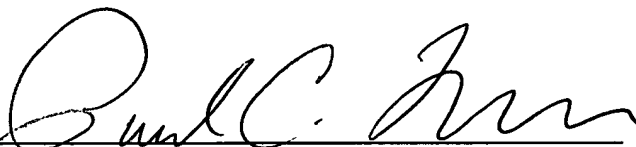
Applicant respectfully petitions under the provisions of 37 C.F.R. § 1.136(a) and § 1.17 for a three-month extension of time in which to respond to the Examiner's Office Action. The Extension of Time Fee in the amount of **\$980.00** is attached hereto.

In the event there are any matters remaining in this application, the Examiner is invited to contact Paul C. Lewis, Registration No. 43,368 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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